

HEAT STRESS

KEEPING COOL WHEN IT'S HOT

The heat is back and working in hot environments puts extra stress on the body's cooling system. When heat is combined with other stresses -- like hard physical work, loss of fluids, or fatigue -- it may lead to a heat related illness, disability, or even death!

The body is always generating heat and passing it to the environment. The harder you work, the more heat your body has to get rid of. Heat leaves your body in several ways:

- transfer from skin to air
- evaporation by perspiration
- exhaling hot air
- touching a cool object

Individuals over the age of 40 need to take extra care when the weather is hot, because our ability to sweat declines as we age. However, heat stress can also affect individuals who are young and fit.

Water is crucial in helping the body adjust to high temperatures. The rate of water needed must equal the increased rate of water loss in order to keep a normal body temperature. The hotter it is, the more important it is to drink plenty of water!

Your body must work even harder to get rid of excess heat when conditions are both hot and humid. Unfortunately, perspiration can't evaporate as readily under muggy conditions. The process is easier if the surrounding air is moving. That's why we welcome a cool breeze, or turn on a fan when the air is "sticky".

Sickness and accident rates increase when heavy work is done at temperatures above 30°C degrees. It's important not to push yourself beyond your limits. It could be harmful to your health, and could put you at increased risk of having an accident.

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SAFE WORKPLACES

ONTARIO LAUNCHES NEW SAFE WORKPLACE PLAN

“The McGuinty government and its workplace partners are committed to eliminating all workplace injuries,” said Labour Minister Brad Duguid. “Workers have a right to go home each day to their families, safe and sound.”

The new strategy will focus on workplaces according to a variety of factors, including injury rates and related costs, compliance history, hazards inherent to the work, new businesses, business size, specific incidents such as fatal or critical injuries, and the presence of new, young or otherwise vulnerable workers.

focuses resources where they are needed the most.”

The Minister said the decline in the annual LTI rate translates into more than 50,000 LTIs avoided over the four years from April 1, 2004, to March 31, 2008. The annual LTI rate is now 20 per cent lower than it was four years ago.

A new plan to promote safe workplaces was recently launched by the Ontario government.

The plan, *Safe At Work Ontario*, builds on the success of a four-year targeted compliance strategy by the Ministry of Labour (MOL). The strategy, which ended in the spring, focused mainly on workplaces with higher than average lost time injury (LTI) rates and claim costs.

“*Safe At Work Ontario* takes a broader approach to safety inspections and affords inspectors more flexibility to work with employers to develop a strong health and safety culture in the workplace,” the Minister

He noted that this decline has enabled employers to avoid about \$5 billion in direct costs (Workplace Safety and Insurance Board (WSIB) premiums) and indirect costs such as those related to lost productivity, re-hiring and re-training.

“CAN WE TOTALLY ELIMINATE RISK FROM THE WORKPLACE?”

said at the June 11th launch of the new plan at the Centre for Health & Safety Innovation in Mississauga.

“It enables inspectors to visit workplaces before injuries occur and

“Can we totally eliminate risk from the workplace?” the Minister asked. “No, of course we can’t. But we can do a lot better at identifying potential hazards and reducing the risks. It’s important to promote a culture of workplace safety.”


DRIVING IN ONTARIO UPDATE

According to the Ministry of Transportation, 8 out of every 10 collisions are caused by driver distractions. However earlier studies had suggested driver distractions were estimated to cause between 20% to 40% of all collisions.

Driving is a very demanding task, yet

almost all drivers try to do other things while behind the wheel. Under Ontario’s Careless Driving Law, a motorist may be fined up to \$1,000 or worse yet, a jail term for a maximum of 6 months. But drivers still discipline their kids, argue with passengers, use cell phones and other electronic devices, groom themselves, eat and

even read while on the road.

As an employer, think about how the work environment can sometimes extend beyond the office to the vehicle. Ensure you have policies and procedures in place that educate and protect the safety of your employees - *wherever they are working.* 



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SAFE WORKPLACES

STRIVING FOR SUCCESS

Sophie Dennis, Assistant Deputy Minister of Operations Division, said, as part of the new plan, MOL's 430 full-time health and safety inspectors will be able to refer workplaces to Health and Safety

Associations (HSAs) for additional assistance and training.

The plan also features:

- improved program flexibility and effectiveness in determining the most appropriate workplaces for intervention. For example, these may include some that have not recently experienced any injuries.
- development of annual sector specific plans that provide flexibility to focus on sector specific hazards and characteristics. Strategies that specify how the new identification criteria will be used have already been developed for industrial, health care, construction and mining sectors.

"The results of an inspection will determine the level of engagement and frequency of subsequent inspections for that workplace," Sophie said.

"The ministry will also continue to work with its education and prevention partners – the WSIB and HSAs – to

identify and engage employers with high rates of injury."

Dr. Maurice Bitran, Director of MOL's Occupational Health & Safety Branch,

"...A STRONGER CULTURE OF WORKPLACE SAFETY"

said a strong health and safety workplace culture consists of:

- competence featuring appropriate knowledge and training, systems for responding to workplace events and a well-functioning Joint Health & Safety Committee (JHSC);
- commitment that involves demonstrated safety leadership by employers, the right policies and procedures to protect workers and insistence on full compliance with good health and safety practices; and
- capacity involving adequate resources for preventing injuries and a good system for obtaining assistance from health and safety associations and the WSIB

"The goal of the new plan is to enforce the Occupational Health & Safety Act (OHSA) while educating workers about the importance of workplace safety and lessening the burden on the health care system," Maurice said.

"To achieve this, our inspectors will work with employers to create a stronger culture of workplace safety."

For more information, contact your local Farm Safety Association consultant or visit

us at www.farmsafety.ca. Additional information is available on the Ministry of Labour's website at www.labour.gov.on.ca/english/hs/sawo/index.html 

QUICK FACTS

- A compliance program that ran from April 1, 2004 to March 31, 2008 reduced the workplace unjury rate by 20%, or more than 50,000 incidents.
- Because of this drop in the annual rate of lost time injuries, employers have avoided about \$5 billion in direct and indirect costs during the four years ending March 31, 2008. Reduced injuries also result in less strain on the health care system, and fewer workers off the job means increased productivity for Ontario's economy.
- Ontario employs 430 full-time health and safety inspectors.

PROTECT YOURSELF

FROM SYMPTOMS OF HEAT STRESS

continued from cover page

HEAT STRESS HAZARDS

Here are three common conditions that can result from the body overheating.

Heat Cramps

Heavy sweating drains the body of salt, which cannot be replaced by simply drinking water. As a result, painful cramps can occur in the arms, legs, or stomach while on the job, or later at home. In this case move to a cool area at once. Loosen clothing and drink cool, lightly-salted water or a fluid replacement beverage. If the cramps persist or become more severe, seek medical aid.

Heat Exhaustion

Inadequate water and salt intake cause the body's cooling system to break down. Symptoms include heavy sweating, clammy skin, body temperature over 38°C, weak pulse and normal to low blood pressure. The person is likely to be tired, weak,

clumsy, upset or confused. They will be very thirsty and will pant or breathe rapidly. Their vision may be blurred. It's extremely important to get medical help immediately! Heat exhaustion can lead to heat stroke, which can be fatal. To help, move the person to a cool, shaded area. Loosen or remove excess clothing. Provide

HEAT STROKE CAN KILL A PERSON QUICKLY!

cool, lightly-salted water. Fan and spray them with cool water.

Heat Stroke

Heat stroke can kill a person quickly. Once the body uses up all its reserves of water and salt, sweating will stop. However body temperatures can still rise quickly. You can assume a person is suffering from heat stroke if their body temperature is over 41°C, and you see any of the following symptoms:

- weakness, confusion, distress, strange behaviour

- hot, dry, red skin
- rapid pulse
- headache or dizziness
- in later stages of heat stroke, a person may pass out and have convulsions

Call an ambulance immediately if heat stroke is suspected. The person's life may be on the line! Until help arrives, move them to a cool area and remove excess clothing. Fan and spray them with cool water. Offer sips of water if they are conscious.

EMPLOYER RESPONSIBILITIES

Employers have the duty under section 25(2)(h) of the Occupational Health & Safety Act (OHSA) to "take every precaution reasonable in the circumstances for the protection of a worker". This includes developing policies and procedures to protect workers in hot environments due to hot processes or hot weather. For compliance purposes, the Ministry of Labour (MOL) has a recommended current threshold limit value (TLV) for heat stress and heat strain, published by the American Conference of Governmental Industrial Hygienists (ACGIH). These values are based on preventing unacclimatized workers' core temperatures from rising above 38°C.

A translation of the 2007 ACGIH moderate action level (unacclimatized)



HUMIDITY VS. TEMPERATURE

CHARTING THE DANGER ZONES

workload category values from the heat stress/strain TLV into Humidex units can be seen in the following heat stress chart – relating temperature and humidity in terms of humidex.


Since the Ministry of Labour heat stress guidelines state that “hot spells in Ontario seldom last long enough for workers to acclimatize,” workers performing “moderate” work (e.g. work with some pushing, lifting etc.) cannot

be assumed to be acclimatized unless they are regularly exposed to significant radiant heat. Workers performing “heavy” work (e.g. shovelling dry sand) however could probably be considered acclimatized during the warm weather season.

Limitations

This table is based on the assumption that the work is being performed under conditions with little or no radiant heat,

and workers wearing regular summer clothing; if your conditions vary from these, make adjustments by educating workers in such environments and emphasizing proper clothing considerations.

To get your heat stress toolkit (a guide book, poster and awareness tool) today, download it off our website, www.farmsafety.ca. 

TEMPERATURE (°C)	RELATIVE HUMIDITY (%)																					
	100%	95%	90%	85%	80%	75%	70%	65%	60%	55%	50%	45%	40%	35%	30%	25%	20%	15%	10%			
49																			50	49		
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39														49	47	45	43	41	39	37	39	
38													49	47	45	44	42	40	38	36	38	
37												49	47	45	44	42	40	38	37	35	37	
36													50	49	47	45	44	42	40	39	37	36
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34														50	48	46	45	43	42	40	39	37
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Note: Clothing and radiant heat must also be taken into account when using this guideline.

Source: Heat Stress Awareness Guide, WSIB 2007

UNSUSPECTED INJURIES

GRAIN BIN & SILO AWARENESS

Before you remove grain from your steel bins and concrete silos, it is important to do a visual inspection of your structure.

Grain storage structures carry very large loads. An engineer should be involved in the design of the structure. An engineer should also be on-site to be sure that it is constructed according to the manufacturer's or designer's requirements.

It is important to understand that grain behaves as a fluid. Often, wall pressures are very large, depending on the depth of the storage. Additional pressures can develop as

grain is removed from the structure.

Surveying your storage structure and looking for signs of stress is critical before emptying a bin or silo. Safety is of prime importance. In any situation, when emptying a bin or silo, always provide an unrestricted escape route and be watchful of possible structural movement.

WHAT TO LOOK FOR...

If your grain bin or silo is showing signs of stress before you empty it, you should contact a professional engineer who can follow up with further investigation.



Other signs of distress may be present, depending on your particular situation. Take advantage of the free downloadable OMAFRA information sheet on our website.

OCCUPATIONAL ASTHMA

Clinical Asthma affects 2.2 million Canadians of which 330,000 are Occupational Asthma (OA). Many of these cases are directly related to the agricultural and horticultural sector workplace environments.

Sensitized workers can experience symptoms either as soon as they are exposed to the aggravant or several hours later -- such as during the night. Even though it was caused by an occupational aggravant (such as a chemical), asthma symptoms can be triggered by other factors, such as smoke, mould, irritant dust or even cold weather.

Even if exposure to the aggravant has stopped, asthma attacks will often continue for years after.

Symptoms of asthma include:

- wheezing
- chest tightness
- shortness of breath
- difficulty breathing
- coughing

Visit your doctor if you suspect you have symptoms related to occupational asthma.

For more information on Occupational Asthma in Agriculture, Agribusiness, Horticulture and Landscaping visit www.farmsafety.ca to download a free information pamphlet.



PRELIMINARY 2009 PREMIUM RATES

Here's a quick look at next year's premium rates:

2009 Premium Rates			
Rate groups	2009	2008	% change
159	6.78	6.78	0.00%
167	2.72	2.72	0.00%
174	4.27	4.00	+ 6.70%
181	3.14	3.14	0.00%
184	2.54	2.49	+ 2.00%
190	4.31	4.31	0.00%

For more information regarding premium rates, visit the WSIB site at www.wsib.on.ca.

MAKING PLAY SAFE

SECOND ROUND OF GRANTS BEING OFFERED

Back by popular demand, the Safe Play Area Grant program is running for a second year. This year's campaign kicked off in Niagara Falls at the 35th Farm Safety Association Annual Conference in March, 2008.

Keeping kids safe is key to the grant program. The Farm Safety Association wants to place the emphasis on the importance of providing a safe play area on the farm property so that children can learn, grow and play in a safe and supervised environment. The farm, both a workplace and a home, can be seen as a vast area to explore and play for a child. Making sure your child is safe, in such a dynamic environment, can be challenging at the best of times, however must be our primary focus when children are involved.

The Farm Safety Association is again offering 100 grants of up to \$500 to farm owners who build a **Safe Play Area** on their property while meeting all grant conditions.

The grant application requires a simple description of how the proposed play area will be built and an estimate of proposed materials. Reimbursements of up to \$500 of project costs will be distributed once the application is approved, the project is complete and receipts are submitted.

To qualify for the grant program, simply plan a Safe Play Area for your young child, under 10 yrs. who lives on your farm. Grant details, application form, required funding conditions and a booklet entitled **Creating Safe Play Areas of Farms** (produced by the



THE FARM, BOTH A WORKPLACE AND A HOME, CAN BE SEEN AS A VAST AREA TO EXPLORE AND PLAY FOR A CHILD

Marshfield Clinic in Wisconsin), can be downloaded at www.farmsafety.ca or by calling us at **1.800.361.8855**.

All completed grant applications must be submitted no later than **August 31, 2008** to the Farm Safety Association. The Safe Play Area grant program is part of the Farm Safety Associations ongoing child safety campaigns. 

PRODUCTS

HEAT STRESS POSTER & HUMIDITY CHART

During the summer, the hot temperatures outside mean increased health risks for workers due to heat stress. Find a poster and chart included with your July Farmsafe newsletter.



CREATING SAFE PLAY AREAS ON FARMS

The Farm Safety Association has always stressed child safety and awareness in our activities. Here is a guide to get your Safe Play Area started for 2008.



ANNOUNCEMENTS & EVENTS



SUMMER TIME REMINDERS

Summertime is time to be outside and enjoy the weather. Playing safely this season is just going to make it all the better so please keep your family and workers safe and healthy this summer by learning about sun safety, West Nile virus, water safety, and taking extra caution on and around all roadways.

DATES TO WATCH FOR

June-July	Safety Day Camps in your local area
Aug. 20-21	Hastings Plowing Match - Hastings, Ontario
Sept. 16-20	2008 International Plowing Match - Teeswater, Ontario
Nov. 7-16	2008 Royal Agricultural Winter Fair - Toronto, Ontario
Mar. 30-31	2009 Farm Safety Association Annual Conference & AGM - Niagara Falls, Ontario



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